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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/404,047	09/23/1999	PRADEEP IYER	AVERP2511USA	7985

7590 04/20/2004

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EXAMINER

LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/404,047

**Applicant(s)**

IYER ET AL.

**Examiner**

Rip A. Lee

**Art Unit**

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 and 58-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-46, 59 and 60 is/are allowed.
- 6) ☒ Claim(s) 1-21 and 58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This office action follows a request for continued examination (RCE) under 37 § C.F.R. 1.114, filed on January 14, 2004. Claims 1-46 and 58-60 are pending in the application.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,812,541 to Mallya *et al.* for the same reasons set forth in previous office actions.

Briefly, Mallya *et al.* teaches a copolymer comprised of (a) 55-85 % C<sub>4-12</sub> alkyl (meth)acrylate ester, (b) 1-10 % N-vinyl lactam, (c) 0-15 % unsaturated carboxylic acid, and (d) a crosslinkable, glycidyl monomer in 0.01-2 % by weight of the entire mixture. The composition also contains up to 35 % of C<sub>1-4</sub> alkyl (meth)acrylate ester (claims 1 and 18). The adhesive copolymer has a glass transition temperature,  $T_g$ , less than about -15 °C (claim 1). The composition is further comprised of specifically defined copolymerizable monomers such as polystyryl ethyl methacrylate and acetoacetoxyl ethyl methacrylate, among others (claim 2).

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3. Claims 1-15, 17, 19-21, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,639,811 to Plamthottam *et al.* for the same reasons set forth in previous office actions.

To summarize, Plamthottam *et al.* claim a copolymer comprised of (a) 55-85 % C<sub>4-12</sub> alkyl (meth)acrylate ester, (b) 0-30 % *N*-vinyl lactam, (c) 0-15 % unsaturated carboxylic acid, (d) 0.01-2 % of a crosslinkable, glycidyl monomer, and (e) 0-35 % C<sub>1-4</sub> alkyl (meth)acrylate ester (claim 1). The copolymer has a glass transition temperature,  $T_g$ , less than about -15 °C (claim 1). A tackifier is incorporated into the mixture (claim 1). The use of plasticizers and other addenda is contemplated (col. 5, lines 23-25), and use of aluminum acetylacetonate as crosslinking agent is also taught (col. 8, line 30).

4. Claims 1 and 3-9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,988,742 to Moon *et al.*

Example 1-C of Moon *et al.* discloses a pressure sensitive adhesive composition comprising 76 parts of isooctyl acrylate, 18 parts of *N*-vinyl pyrrolidone, 6 parts of acrylic acid, and 0.15 parts of hexanediol diacrylate (col. 9, lines 51-65).

5. Claims 1, 3-5, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,612,136 to Everaerts *et al.*

Example 23 of Everaerts *et al.* reveals an adhesive composition comprised of 68 pw isooctyl acrylate, 31 pw of *N,N*-dimethyl acrylamide, 1 pw acrylic acid, and 0.8 pw of hexanediol diacrylate.

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***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Plamthottam *et al.* in view of U.S. Patent No. 5,215,818 to Coopridier *et al.*

Although the use of plasticizers and other addenda is contemplated in Plamthottam *et al.*, the inventors do not elucidate the nature of said plasticizer. Coopridier *et al.* teaches the use of standard materials, for example, dioctyl phthalate, 2-ethyl hexyl phosphate and cresyl phosphate (col. 7, lines 59-61), as useful plasticizers for acrylate based pressure sensitive adhesives (col. 3-4). Therefore, one having ordinary skill in the art would have found it obvious to use the plasticizers disclosed in Coopridier *et al.* in pressure sensitive adhesive compositions, as contemplated by Plamthottam *et al.*

***Allowable Subject Matter***

9. The following is a statement of reasons for the indication of allowable subject matter: Claims 22-46, 59 and 60, drawn to adhesive blends are allowable over the cited prior art since none teaches or suggests adhesives prepared from blends.

***Response to Arguments***

10. Applicant's arguments have been considered fully, but they are not persuasive. Applicants contend that the general teachings of the prior art do not provide a basis for an anticipation rejection; instead, they may, at best, be used for an obviousness rejection.

As elucidated in the advisory action, the *claimed* subject matter is anticipated entirely by the claims of the prior art. The comparison of claims is reproduced below.

**Present Claim 1**

- (a) major amount of (meth)acrylate ester
- (b) 8-30 wt % of N-containing monomer
- (c) 0.15-15 wt % of unsaturated carboxylic acid
- (d) 1+ crosslinkable monomer

**Mallya *et al.***

- (a) 55-85 wt % of (meth)acrylate ester
- (b) 1-10 wt % of N-vinyl lactam
- (c) 0-15 wt % of unsaturated carboxylic acid
- (d) 0.01-2 wt % of glycidyl monomer

**Present Claim 1**

- (a) major amount of (meth)acrylate ester
- (b) 8-30 wt % of N-containing monomer
- (c) 0.15-15 wt % of unsaturated carboxylic acid
- (d) 1+ crosslinkable monomer

**Plamthottam *et al.***

- (a) 55-85 wt % of (meth)acrylate ester
- (b) 0-30 wt % of activator moiety
- (c) up to 15 wt % of unsaturated carboxylic acid
- (d) 0.01-2 wt % of glycidyl methacrylate ester

In particular, dependent claim 3 of Plamthottam *et al.* indicates that activator component (b) is N-vinyl pyrrolidone. The glycidyl monomer adequately qualifies as crosslinkable monomer.

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Applicants submit that the references do not teach the exact composition of the present invention, and if this is the case, the present claims may be amended appropriately to reflect Applicants invention. To assist matters, one may use examples cited in Moon *et al.* and Everaerts *et al.* (vide supra) as references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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April 18, 2004



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